2-Phase Hybrid Stepping Motor 1.8°

KH56 series

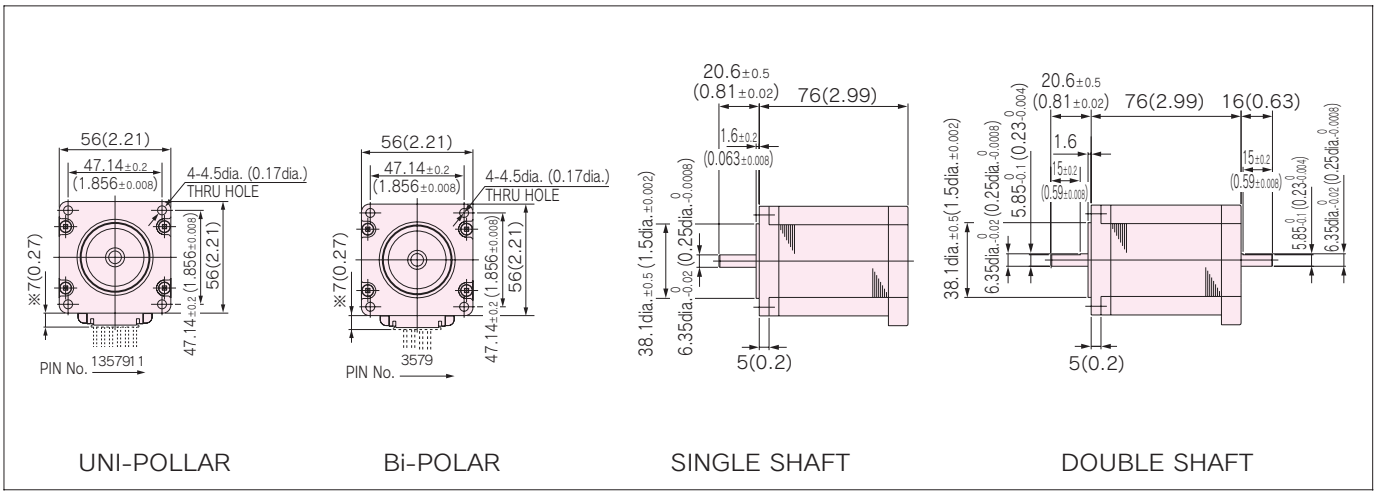
HIGH TORQUE, LOW VIBRATION AND LOW NOISE

■ STANDARD SPECIFICATIONS

For red-lines product, please contact us from website.

M O D E L		KH56QM2			
	SINGLE SHAFT	-901	-902	-903	~~-951~~
	DOUBLE SHAFT	-911	-912	-913	-961
DRIVE METHOD	————	UNI-POLAR			BI-POLAR
NUMBER OF PHASES	————	2			2
STEP ANGLE	deg./step	1.8			1.8
VOLTAGE	V	3.54	5.46	9.9	4.0
CURRENT	A/PHASE	3.0	2.0	1.0	2.0
WINDING RESISTANCE	Ω/PHASE	1.18	2.73	9.9	2.0
INDUCTANCE	mH/PHASE	2.4	5.4	21.6	7.35
HOLDING TORQUE	mN · m	1324	1324	1324	1373
	oz · in	187	187	187	194
DETENT TORQUE	mN · m	69	69	69	69
	oz · in	9.8	9.8	9.8	9.8
ROTOR INERTIA	g · cm²	269	269	269	269
	oz · in²	1.47	1.47	1.47	1.47
WEIGHTS	kg	1.0	1.0	1.0	1.0
	lb	2.2	2.2	2.2	2.2
INSULATION RESISTANCE	————	500VDC 100MΩmin.			
DIELECTRIC STRENGTH	————	500VAC 50HZ 1min.			
OPERATING TEMP. RANGE	℃	0 to 50			
ALLOWABLE TEMP. RISE	K	70			

■ DIMENSIONS unit = mm (inch)



UNI-POLLAR Bi-POLAR SINGLE SHAFT DOUBLE SHAFT

Features

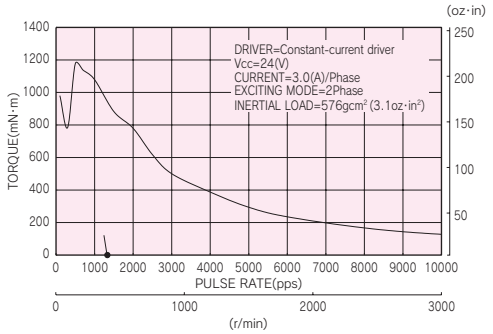
- Stronger torque generated in higher speed zone (KH56KM2-901 generates 1.2 times torque of our previous model at 1200 r/min. speed)
- Lowered Vibration by increased stiffness of body construction (lowered by 10% than our previous model)
- Improved Efficiency (1.1 times of our previous model, by high grade materials)

PULL-OUT
PULL-IN

■ TORQUE CHARACTERISTICS vs. PULSE RATE

UNI-POLAR

KH56QM2-901, 911



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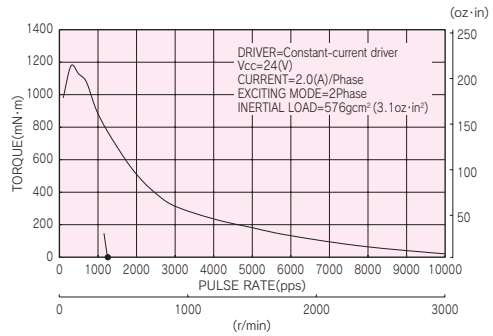
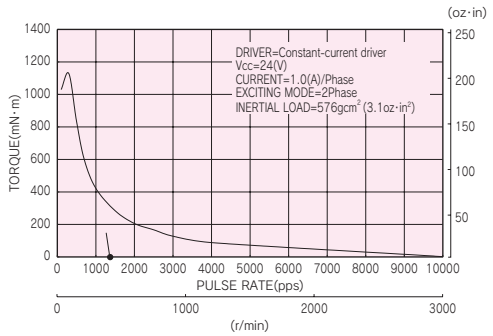
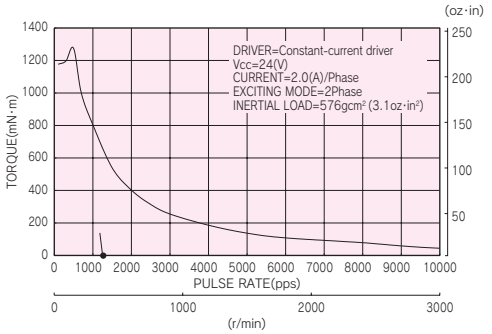


KH56QM2-903, 913



BI-POLAR

~~KH56QM2-951~~, 961

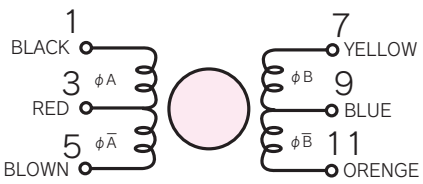


For red-lined product, please contact to our sales and/or customer service.

cscenter@nidec-servo.com
http://www.nidec.com/en/nidec-servo

■ CONNECTION DIAGRAMS

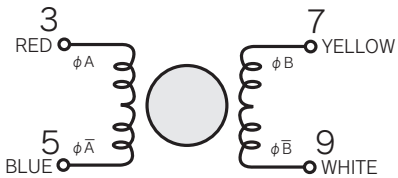
UNI-POLAR



EXCITATION SEQUENCE

STEP	1	2	3	4
BLACK	−			−
YELLOW	−	−		
BLOWN		−	−	
ORENGE			−	−
RED	+	+	+	+
BLUE	+	+	+	+

BI-POLAR

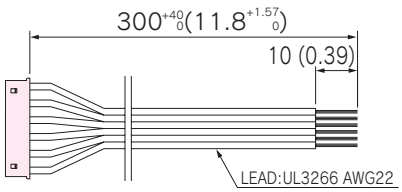
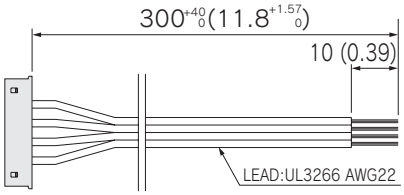


EXCITATION SEQUENCE

STEP	1	2	3	4
RED	+	+	−	−
YELLOW	−	+	+	−
BLUE	−	−	+	+
WHITE	+	−	−	+

■ CONNECTION CABLE TO MOTOR unit = mm (inch)

UNI-POLAR



BI-POLAR